

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 9-26-2012
API #: 47-009-00111

Farm name: Brooke County Park BRK 8H Operator Well No.: 834341

LOCATION: Elevation: 1206' Quadrangle: Stuebenville East

District: Buffalo County: Brooke
Latitude: 1740' Feet South of 40 Deg. 17 Min. 30 Sec.
Longitude 11350' Feet West of 80 Deg. 32 Min. 30 Sec.

Company: Chesapeake Appalachia, L.L.C.

Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
<u>P.O. Box 18496</u>				
<u>Oklahoma City, OK 73154-0496</u>	<u>20"</u>	<u>120'</u>	<u>120'</u>	<u>202 Cu. Ft.</u>
Agent: <u>Eric Gillespie</u>	<u>13 3/8"</u>	<u>396'</u>	<u>396'</u>	<u>505 Cu. Ft.</u>
Inspector: <u>Bill Hendershot</u>	<u>9 5/8"</u>	<u>1758'</u>	<u>1758'</u>	<u>808 Cu. Ft.</u>
Date Permit Issued: <u>11-18-2011</u>	<u>5 1/2"</u>	<u>10804'</u>	<u>10804'</u>	<u>2470 Cu. Ft.</u>
Date Well Work Commenced: <u>1-15-2012</u>				
Date Well Work Completed: <u>6-28-2012</u>				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): <u>6018'(cement plug @4980'-5978')</u>				
Total Measured Depth (ft): <u>10807'</u>				
Fresh Water Depth (ft.): <u>73', 250'</u>				
Salt Water Depth (ft.): <u>1126'</u>				
Is coal being mined in area (N/Y)? <u>N</u>				
Coal Depths (ft.): <u>330'</u>				
Void(s) encountered (N/Y) Depth(s) <u>N</u>				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation Marcellus Pay zone depth (ft) 6,240'-10,663'

Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d

Final open flow Not Tested MCF/d Final open flow _____ Bbl/d

Time of open flow between initial and final tests _____ Hours

Static rock Pressure _____ psig (surface pressure) after _____ Hours

Second producing formation _____ Pay zone depth (ft) _____

Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d

Final open flow _____ MCF/d Final open flow _____ Bbl/d

Time of open flow between initial and final tests _____ Hours

Static rock Pressure _____ psig (surface pressure) after _____ Hours

RECEIVED

SEP 27 2012

Environmental Protection

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Martine Williams
Signature

9-27-2012
Date

Were core samples taken? Yes _____ No X

Were cuttings caught during drilling? Yes _____ No X

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list GR, neutron, density, and resistivity
open hole logs run from 0' - 6,000' MD; LWD GR from 4,900' - 10,746' MD.

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

(See Attached)

Plug Back Details Including Plug Type and Depth(s): Cement plug @4980'-5979'

<u>Formations Encountered:</u>	<u>Top Depth</u>	<u>/</u>	<u>Bottom Depth</u>
<u>Surface:</u>			

(See Attached)

Well Number and Name: 834341 Brooke County Park BRK 8H

[illegible]

VERTICAL PILOT HOLE

Formation/Lithology	Top Depth, TVD/MD (ft)	Bottom Depth, TVD/MD (ft)
LS/SHALE	0	330
PITTSBURG COAL	330	340
SHALE	340	1000
SS/SHALE	1000	1300
SHALE/LS/SS	1300	1340
BIG INJUN (SS)	1340	1624
SHALE	1624	5727
GENESEO (SH)	5727	5740
TULLY (LS)	5740	5801
HAMILTON (SH)	5801	5904
MARCELLUS (SH)	5904	5965
ONONDAGA (LS)	5965	
TD OF PILOT HOLE		6000

**LATERAL SIDETRACK
WELLBORE**

Formation/Lithology	Top Depth, MD (ft)	Top Depth, TVD (ft)	Bottom Depth, MD (ft)	Bottom Depth, TVD (ft)
LS/SHALE	0	0	330	330
PITTSBURG COAL	330	330	340	340
SHALE	340	340	1000	1000
SS/SHALE	1000	1000	1300	1300
SHALE/LS/SS	1300	1300	1340	1340
BIG INJUN (SS)	1340	1340	1624	1624
SHALE	1624	1624	5720	5711
GENESEO (SH)	5720	5711	5734	5724
TULLY (LS)	5734	5724	5804	5785
HAMILTON (SH)	5804	5785	5980	5896
MARCELLUS (SH)	5980	5896		
TD OF LATERAL			10807	6018

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 9-26-2012
API #: 47-009-00105

Farm name: Brooke County Parks BRK 3H

Operator Well No.: 833685

LOCATION: Elevation: 1206'

Quadrangle: Steubenville East

District: Buffalo

County: Brooke

Latitude: 1750' Feet South of 40 Deg. 17 Min. 30 Sec.

Longitude 11340' Feet West of 80 Deg. 32 Min. 30 Sec.

Company: Chesapeake Appalachia, L.L.C.

Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
<u>P.O. Box 18496</u>				
<u>Oklahoma City, OK 73154-0496</u>	<u>13 3/8"</u>	<u>357'</u>	<u>357'</u>	<u>409 Cu. Ft.</u>
Agent: <u>Eric Gillespie</u>	<u>9 5/8"</u>	<u>1576'</u>	<u>1576'</u>	<u>785 Cu. Ft.</u>
Inspector: <u>Bill Hendershot</u>	<u>5 1/2"</u>	<u>9283'</u>	<u>9283'</u>	<u>2245 Cu. Ft.</u>
Date Permit Issued: <u>7-26-2011</u>				
Date Well Work Commenced: <u>11-6-2011</u>				
Date Well Work Completed: <u>6-29-2012</u>				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): <u>5915'</u>				
Total Measured Depth (ft): <u>9287'</u>				
Fresh Water Depth (ft.): <u>73', 250'</u>				
Salt Water Depth (ft.): <u>1126'</u>				
Is coal being mined in area (N/Y)? <u>N</u>				
Coal Depths (ft.): <u>319'</u>				
Void(s) encountered (N/Y) Depth(s) <u>N</u>				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation Marcellus Pay zone depth (ft) 6,145'-9,155'

Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d

Final open flow 1,653* MCF/d Final open flow 203 Bbl/d

Time of open flow between initial and final tests 55 Hours *Calculated

Static rock Pressure 3,825* psig (surface pressure) after _____ Hours

RECEIVED

SEP 26 2012

Second producing formation _____ Pay zone depth (ft) _____

Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d

Final open flow _____ MCF/d Final open flow _____ Bbl/d

Time of open flow between initial and final tests _____ Hours

Static rock Pressure _____ psig (surface pressure) after _____ Hours

Environmental Protection

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Marlene Williams
Signature

9-27-2012
Date

Were core samples taken? Yes _____ No X

Were cuttings caught during drilling? Yes _____ No X

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list GR LWD from 5,295' - 9,226' MD

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

(See Attached)

Plug Back Details Including Plug Type and Depth(s):

<u>Formations Encountered:</u>	<u>Top Depth</u>	<u>/</u>	<u>Bottom Depth</u>
<u>Surface:</u>			

(See Attached)

Well Number and Name: 833685 Brooke County Parks BRK 3H

[illegible]

LATERAL SIDETRACK WELLBORE (no vertical pilot hole associated with this well)

Maximum TVD of wellbore: 5915 ft TVD @ 6648 ft MD

Formation/Lithology	Top Depth, MD (ft)	Top Depth, TVD (ft)	Bottom Depth, MD (ft)	Bottom Depth, TVD (ft)
LS	0	0	250	250
LS/SS	250	250	319	319
PITTSBURG COAL	319	319	327	327
SS	327	327	1350	1350
BIG INJUN (SS)	1350	1350	1606	1606
SHALE	1606	1606	5758	5724
GENESEO (SH)	5758	5724	5774	5736
TULLY (LS)	5774	5736	5861	5796
HAMILTON (SH)	5861	5796	6140	5896
MARCELLUS (SH)	6140	5896		
TD OF LATERAL			9287	5884

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 11-5-2012
API #: 47-009-00124

Farm name: John Good Jr BRK 5H

Operator Well No.: 834956

LOCATION: Elevation: 1145'

Quadrangle: Bethany

District: Buffalo

County: Brooke

Latitude: 10910' Feet South of 40 Deg. 15 Min. 00 Sec.

Longitude 9500' Feet West of 80 Deg. 32 Min. 30 Sec.

Company: Chesapeake Appalachia, L.L.C.

Address:	P.O. Box 18496	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Oklahoma City, OK	73154-0496	13 3/8"	339'	339'	460 Cu. Ft.
Agent:	Eric Gillespie	9 5/8"	1736'	1736'	858 Cu. Ft.
Inspector:	Bill Hendershot	5 1/2"	9817'	9817'	2470 Cu. Ft.
Date Permit Issued:	1-18-2012				
Date Well Work Commenced:	4-24-2012				
Date Well Work Completed:	8-11-2012				
Verbal Plugging:					
Date Permission granted on:					
Rotary <input checked="" type="checkbox"/>	Cable <input type="checkbox"/>	Rig <input type="checkbox"/>			
Total Vertical Depth (ft):	5898'				
Total Measured Depth (ft):	9818'				
Fresh Water Depth (ft.):	300'				
Salt Water Depth (ft.):	1200'				
Is coal being mined in area (N/Y)?	N				
Coal Depths (ft.):	288'				
Void(s) encountered (N/Y) Depth(s)	N				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation Marcellus Pay zone depth (ft) 8,250'-9,679'

Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d

Final open flow 2,143* MCF/d Final open flow 295 Bbl/d

Time of open flow between initial and final tests 54 Hours *Calculated

Static rock Pressure 3,808* psig (surface pressure) after _____ Hours

Second producing formation _____ Pay zone depth (ft) _____

Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d

Final open flow _____ MCF/d Final open flow _____ Bbl/d

Time of open flow between initial and final tests _____ Hours

Static rock Pressure _____ psig (surface pressure) after _____ Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Marlene Williams
Signature

11-9-2012
Date

RECEIVED
OFFICE OF OIL & GAS
2012 NOV 13 P 1:12

Were core samples taken? Yes _____ No N

Were cuttings caught during drilling? Yes Y No _____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list GR, neutron, density, and resistivity
open hole logs run from 0-1764' MD; GR MWD from 5,362'-9,818' MD

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

(See attached)

Plug Back Details Including Plug Type and Depth(s):

Formations Encountered:	Top Depth	/	Bottom Depth
<u>Surface:</u>			

(See attached)

Well Number and Name: 834956 John Good Jr. BRK 5H

[illegible]

LATERAL WELLBORE (no vertical pilot hole associated with this well)

Maximum TVD of wellbore: 5898 ft TVD @ 7763 ft MD

Formation/Lithology	Top Depth, MD (ft)	Top Depth, TVD (ft)	Bottom Depth, MD (ft)	Bottom Depth, TVD (ft)
LS/SS/SH	0	0	288	288
PITTSBURG COAL	288	288	293	293
LS	293	293	420	420
SS	420	420	450	450
LS/SS	450	450	650	650
LS/SS/SH	650	650	810	810
SS/SH	810	810	1300	1300
BIG LIME	1300	1300	1390	1390
BIG INJUN (SS)	1390	1390	1510	1510
SHALE	1510	1510	5892	5702
GENESEO (SH)	5892	5702	5909	5715
TULLY (LS)	5909	5715	6000	5778
HAMILTON (SH)	6000	5778	6183	5866
MARCELLUS (SH)	6183	5866		
TD OF LATERAL			9818	5858

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 10/7/12

API #: 47-039-05763

Farm name: Pugh Operator Well No.: Pugh #2

LOCATION: Elevation: 883.19' Quadrangle: Pocatalico

District: Union County: Kanawha
Latitude: 7100 Feet South of 38 Deg. 27 Min. 30 Sec.
Longitude 2900 Feet West of 81 Deg. 40 Min. 00 Sec.

Company: Viking Energy Corp.

Address: <u>8113 Sissonville Drl</u>	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
<u>Charleston, WV 25320</u>				
Agent: <u>Michael Pinkerton</u>				
Inspector: <u>Terry Urban</u>	<u>13 3/8"</u>	<u>30'</u>	<u>30'</u>	<u>225-sx</u>
Date Permit Issued: <u>11/30/2011</u>	<u>9 5/8"</u>	<u>300'</u>	<u>300'</u>	<u>225-sx</u>
Date Well Work Commenced: <u>5/10/12</u>	<u>7"</u>	<u>2008'</u>	<u>2008"</u>	<u>150-SX</u>
Date Well Work Completed: <u>6/10/12</u>	<u>4 1/2"</u>	<u>4,500'</u>	<u>4,500'</u>	<u>250-SX</u>
Verbal Plugging:				
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input checked="" type="checkbox"/>				
Total Vertical Depth (ft): <u>4,922</u>				
Total Measured Depth (ft): <u>4,922</u>				
Fresh Water Depth (ft.): <u>130</u>				
Salt Water Depth (ft.): <u>1300</u>				
Is coal being mined in area (N/Y)? <u>N</u>				
Coal Depths (ft.):				
Void(s) encountered (N/Y) Depth(s) <u>N</u>				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation Berea Pay zone depth (ft) 2374-2382

Gas: Initial open flow 20 MCF/d Oil: Initial open flow 0 Bbl/d

Final open flow 20 MCF/d Final open flow 0 Bbl/d

Time of open flow between initial and final tests 24 Hours

Static rock Pressure 250 psig (surface pressure) after 24 Hours

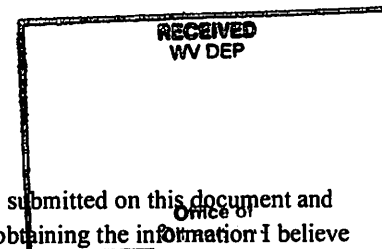
Second producing formation Welch Pay zone depth (ft) 2270-2330

Gas: Initial open flow 20 MCF/d Oil: Initial open flow 0 Bbl/d

Final open flow 20 MCF/d Final open flow 0 Bbl/d

Time of open flow between initial and final tests 24 Hours

Static rock Pressure 250 psig (surface pressure) after 24 Hours



I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete.

Michael Pinkerton
Signature

10-7-12
Date

Were core samples taken? Yes _____ No X

Were cuttings caught during drilling? Yes _____ No N

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list Photo Density Log
Set a retrievable pl _____

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Perforate Berea w/16 shots from 2374-2382 KB 2 shots per ft. Break w/ 10bbls treated water. Start pad & pump as per enclosed schedule. Flush w/300 gal 15%Hcl (Drop 3 3/4 ball after 2 bbls acid) & 28.9 bbls treated water, land ball on 3.562 baffle @ 2342' KB.

Perforated Welch w/13 shot (SF) from 2270-2330" KB. Break w/5 bbls water & continue stimulation as per enclosed schedule. Flush 1 bbl short of top perf SD take ISIP 5 min and 10 min

Plug Back Details Including Plug Type and Depth(s): Set a retrievable plug below the Berea fracked formation.

Set another retrievable plug below the welch at 2340' and fracked formation. went back in and retrieved the plugs.

Formations Encountered:	Top Depth	/	Bottom Depth
Surface:			

Attached

**State of West Virginia
Department of Environmental Protection
Office of Oil & Gas**

Operators well name: Pugh # 2

Farm Name: _____

Company:

Address:

GEOLOGICAL RECORD

Description:	Top	Bottom
Clay/ sand	0	9
Sand/shales/silt	9	610
Sandy shales	610	718
Silty sand	718	800
Shale/sand/silts	800	1200
Salt Sand	1200	1531
Shale	1531	1600
Sand / some shaley stringers	1600	1750
Lime	1750	1780
Big Lime	1780	1950
Injun	1950	1931
Sandy shales	1931	2352
Coffe shale	1931	2373
Berea	2373	2381
Shale	2381	3591
Huron shale	3591	4320
Shale	4320	4560
Rhinestreet	4560	4814
Shale	4814	4840
Marcellus Shale	4840	4902
Onandaga	4902	4923

Additional Comments:

Marcellus 1st Stg: Perforated w/ 22 shots (SF) 4846 - 4898' KB. (300 gal 10% Hcl). Total N2 - 902 mcf.

Stg 2 Rhinestreet. Perf w/ 20 shots (SF) from 4622 - 4734' KB. Pump 350 gal 7 1/2% Hcl acid. 800 mcf N2.

Stg 3 Huron/Dev. Shale. Perforate w/ 51 shots (SF) 3080 - 4166' KB. Pump 500 gal 7 1/2% Hcl acid. Total N2 1,001.6 mcf.

Stg 4

Berea; perf w/ 16 shots from 2374 - 2382' KB. 75Q foam. 350 gals 15% Hcl acid. Could not get frac ball to hold. SD. Did not treat.

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 1-26-2012
API #: 47-041-05593 REVISED

Farm name: Lloyd McCauley Operator Well No.: 3H (831601)

LOCATION: Elevation: 1451' Quadrangle: Walkersville

District: Collins Settlement County: Lewis
Latitude: 3,420' Feet South of 38 Deg. 50 Min. 00 Sec.
Longitude 9860' Feet West of 80 Deg. 25 Min. 00 Sec.

Company: Chesapeake Appalachia, L.L.C.

Address: <u>P.O. Box 18496</u>	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
<u>Oklahoma City, OK 73154-0496</u>	<u>13 3/8"</u>	<u>605'</u>	<u>605'</u>	<u>649 cf</u>
Agent: <u>Eric Gillespie</u>	<u>9 5/8"</u>	<u>1731'</u>	<u>1731'</u>	<u>774 cf</u>
Inspector: <u>Bryan Harris</u>	<u>7"</u>	<u>7215'</u>	<u>7215'</u>	<u>629 cf</u>
Date Permit Issued: <u>11/17/2009</u>	<u>4 1/2"</u>	<u>10698'</u>	<u>4768.64'</u>	<u>529 cf</u>
Date Well Work Commenced: <u>1/6/2010</u>				
Date Well Work Completed: <u>8/23/2010</u>				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): <u>6,886'</u>				
Total Measured Depth (ft): <u>10,708'</u>				
Fresh Water Depth (ft.): <u>475'</u>				
Salt Water Depth (ft.): <u>None</u>				
Is coal being mined in area (N/Y)? <u>N</u>				
Coal Depths (ft.): <u>None</u>				
Void(s) encountered (N/Y) Depth(s) <u>N</u>				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation Marcellus Pay zone depth (ft) 7,096'-10,558'

Gas: Initial open flow 2,027 MCF/d Oil: Initial open flow _____ Bbl/d

Final open flow _____ MCF/d Final open flow _____ Bbl/d

Time of open flow between initial and final tests _____ Hours

Static rock Pressure 3,099 psig (surface pressure) after _____ Hours

Second producing formation _____ Pay zone depth (ft) _____

Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d

Final open flow _____ MCF/d Final open flow _____ Bbl/d

Time of open flow between initial and final tests _____ Hours

Static rock Pressure _____ psig (surface pressure) after _____ Hours

RECEIVED
Office of Oil & Gas

MAR 20 2012

WV Department of
Environmental Protection

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Marlene Williams
Signature

3/16/2012
Date

Were core samples taken? Yes _____ No X

Were cuttings caught during drilling? Yes X No _____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list Mechanical

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

See Attached

Plug Back Details Including Plug Type and Depth(s): PBTD - Cement @ 12,280'

<u>Formations Encountered:</u>	<u>Top Depth</u>	<u>/</u>	<u>Bottom Depth</u>
<u>Surface:</u>			

See Attached

RECEIVED
Office of Oil & Gas

MAR 20 2012

WV Department of
Environmental Protection

Formation/Lithology	Top Depth (ft)	Bottom Depth (ft)
SHALE/SS	0	300
LS/SS	300	600
SHALE	600	800
SS/LS	800	900
SHALE	900	1060
SS	1060	1371
LS	1371	1443
Big Lime	1443	1994
First Sand	1994	2519
Lower Huron	2519	2992
Ball Town	2992	3993
Benson	3993	5243
Elk	5243	6502
Middlesex	6502	6712
Geneseo	6712	6752
Tully	6752	6774
Hamilton	6774	6843
Marcellus	6843	6873
Lower Marcellus	6873	10708

RECEIVED
Office of Oil & Gas

MAR 20 2012

WV Department of
Environmental Protection

Well Name and Number: Lloyd McCauley 3H (831601)

WV Department of
Environmental Protection

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 1-26-2012
API #: 47-049-02110

Farm name: Edwin Bunner Operator Well No.: 8H (832110)

LOCATION: Elevation: 1469' Quadrangle: Gladesville

District: Winfield County: Marion
Latitude: 6914' Feet South of 39 Deg. 30 Min. 00 Sec.
Longitude 3577' Feet West of 80 Deg. 57 Min. 30 Sec.

Company: Chesapeake Appalachia, L.L.C.

Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
<u>P.O. Box 18496</u>				
<u>Oklahoma City, OK 73154-0496</u>	<u>13 3/8"</u>	<u>443'</u>	<u>443'</u>	<u>537 cf</u>
Agent: <u>Eric Gillespie</u>	<u>9 5/8"</u>	<u>2875'</u>	<u>2875'</u>	<u>1350 cf</u>
Inspector: <u>Tristan Jenkins</u>	<u>5 1/2"</u>	<u>13035'</u>	<u>13035'</u>	<u>2890 cf</u>
Date Permit Issued: <u>6/28/2010</u>				
Date Well Work Commenced: <u>2/21/2011</u>				
Date Well Work Completed: <u>5/13/2011</u>				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): <u>7,310'</u>				
Total Measured Depth (ft): <u>13,038'</u>				
Fresh Water Depth (ft.): <u>350'</u>				
Salt Water Depth (ft.): <u>None</u>				
Is coal being mined in area (N/Y)? <u>N</u>				
Coal Depths (ft.): <u>None</u>				
Void(s) encountered (N/Y) Depth(s) <u>N</u>				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation Marcellus Pay zone depth (ft) 7,444'-12,966'

Gas: Initial open flow 4,982 MCF/d Oil: Initial open flow _____ Bbl/d

Final open flow _____ MCF/d Final open flow _____ Bbl/d

Time of open flow between initial and final tests _____ Hours

Static rock Pressure 4,752 psig (surface pressure) after _____ Hours

Second producing formation _____ Pay zone depth (ft) _____

Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d

Final open flow _____ MCF/d Final open flow _____ Bbl/d

Time of open flow between initial and final tests _____ Hours

Static rock Pressure _____ psig (surface pressure) after _____ Hours

RECEIVED
Office of Oil and Gas
MAR 20 2012
WV Dept. of Environmental Protection

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Maureen Williams
Signature

3-19-2012
Date

Were core samples taken? Yes _____ No N

Were cuttings caught during drilling? Yes Y No _____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list GR, neutron, density, and resistivity
open hole logs run from 0-7560' MD; LWD GR from 6593-12959' MD.

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

See Attached

Plug Back Details Including Plug Type and Depth(s): PBTD cement @ 12,886'

<u>Formations Encountered:</u>	<u>Top Depth</u>	<u>/</u>	<u>Bottom Depth</u>
<u>Surface:</u>			

See Attached

RECEIVED
Office of Oil & Gas
MAR 20 2012
NY Department of
Environmental Conservation

Formation/Lithology	Top Depth (ft)	Bottom Depth (ft)
SS/SHALE	0	460
SHALE	460	640
SS	640	740
LS	740	899
Big Lime	899	995
Big Injun	995	1050
SHALE/SS	1050	1193
Berea	1193	1222
SHALE	1222	1440
SHALE/SS	1440	1640
SS	1640	1660
SHALE	1660	1920
SS	1920	2040
SHALE/SILT	2040	7160
Geneseo	6920	6974
Tully	6974	7048
Hamilton	7048	7319
Marcellus	7319	13038

RECEIVED
 Office of Oil & Gas
 MAR 29 2012
 WV Department of
 Environmental Protection

Well Name and Number: Edwin Bunner 8H (832110)

RECEIVED
Office of Oil & Gas
MAR 20 2012
Wy Department of
Environmental Protection

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 9-14-2012
API #: 47-049-02159

Farm name: Quality Reclamation 8H

Operator Well No.: 833342

LOCATION: Elevation: 1230'

Quadrangle: Grant Town

District: Paw Paw

County: Marion

Latitude: 10277' Feet South of 39 Deg. 35 Min. 00 Sec.

Longitude 11035' Feet West of 80 Deg. 07 Min. 30 Sec.

Company: Chesapeake Appalachia, L.L.C.

Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
P.O. Box 18496				
Oklahoma City, OK 73154-0496	20"	120'	120'	286 Cu. Ft.
Agent: Eric Gillespie	13 3/8"	553'	553'	623 Cu. Ft.
Inspector: Bill Hendershot	9 5/8"	3208'	3208'	1493 Cu. Ft.
Date Permit Issued: 12-20-2011	5 1/2"	15440'	15440'	3115 Cu. Ft.
Date Well Work Commenced: 3-18-2012				
Date Well Work Completed: 4-16-2012				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): 7988'(cement plug @ 7068' - 7980')				
Total Measured Depth (ft): 15443'				
Fresh Water Depth (ft.): 350'				
Salt Water Depth (ft.): None				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 508'				
Void(s) encountered (N/Y) Depth(s) Y 508'				

RECEIVED
Office of Oil & Gas

SEP 17 2012

WV Department of
Environmental Protection

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation Marcellus Pay zone depth (ft) 8,080'-15,310'

Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d

Final open flow 2,237* MCF/d Final open flow 0 Bbl/d

Time of open flow between initial and final tests 39 Hours *Calculated

Static rock Pressure 5,073* psig (surface pressure) after _____ Hours

Second producing formation _____ Pay zone depth (ft) _____

Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d

Final open flow _____ MCF/d Final open flow _____ Bbl/d

Time of open flow between initial and final tests _____ Hours

Static rock Pressure _____ psig (surface pressure) after _____ Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Marlene Williams
Signature

9-14-2012
Date

Were core samples taken? Yes X No _____

Were cuttings caught during drilling? Yes _____ No X

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list GR, neutron, density, and resistivity
open hole logs run from 0' - 7,988' MD; LWD GR from 7,086' - 15,396' MD.

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

(See Attached)

Plug Back Details Including Plug Type and Depth(s): Cement plug @ 7068' - 7980'

Formations Encountered:	Top Depth	/	Bottom Depth
Surface:			

(See Attached)

Well Number and Name: 833342 Quality Reclamation 8H

[illegible]

VERTICAL PILOT HOLE

Formation/Lithology	Top Depth, TVD/MD (ft)	Bottom Depth, TVD/MD (ft)
SS	0	400
LS	400	500
SS	500	600
LS	600	750
SS	750	850
SILTSTONE	850	1300
SH	1300	1330
SS	1330	1420
SH	1420	1450
SS	1450	1600
SILTSTONE	1600	1613
BIG INJUN (SS)	1613	1810
LS	1810	2020
SH	2020	2110
BEREA (SS)	2110	3152
SH/SILTSTONE	3152	7218
GENESEO	7218	7270
TULLY	7270	7327
HAMILTON	7327	7735
MARCELLUS	7735	7849
ONONDAGA (LS)	7849	
TD OF PILOT HOLE		7988

**LATERAL SIDETRACK
WELLBORE**

Formation/Lithology	Top Depth, MD (ft)	Top Depth, TVD (ft)	Bottom Depth, MD (ft)	Bottom Depth, TVD (ft)
SS	0	0	400	400
LS	400	400	500	500
SS	500	500	600	600
LS	600	600	750	750
SS	750	750	850	850
SILTSTONE	850	850	1300	1300
SH	1300	1300	1330	1330
SS	1330	1330	1420	1420
SH	1420	1420	1450	1450
SS	1450	1450	1600	1600
SILTSTONE	1600	1600	1613	1613
BIG INJUN (SS)	1613	1613	1810	1810
LS	1810	1810	2020	2020
SH	2020	2020	2110	2110
BEREA (SS)	2110	2110	3152	3152
SH/SILTSTONE	3152	3152	7513	7504
GENESEO	7513	7504	7570	7556
TULLY	7570	7556	7633	7609
HAMILTON	7633	7609	7864	7761
MARCELLUS	7864	7761		
TD OF LATERAL			15443	7802

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 9-13-2012
API #: 47-049-02186

Farm name: Wesbanco Bank MRN 8H Operator Well No.: 834043

LOCATION: Elevation: 1257' Quadrangle: Rivesville

District: Winfield County: Marion
Latitude: 7566' Feet South of 39 Deg. 32 Min. 30 Sec.
Longitude 2403' Feet West of 80 Deg. 02 Min. 30 Sec.

Company: Chesapeake Appalachia, L.L.C.

Address: <u>P.O. Box 18496</u>	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
<u>Oklahoma City, OK 73154-0496</u>	<u>20"</u>	<u>124'</u>	<u>124'</u>	<u>224 Cu. Ft.</u>
Agent: <u>Eric Gillespie</u>	<u>13 3/8"</u>	<u>303'</u>	<u>303'</u>	<u>331 Cu. Ft.</u>
Inspector: <u>Sam Ward</u>	<u>9 5/8"</u>	<u>2826'</u>	<u>2826'</u>	<u>1332 Cu. Ft.</u>
Date Permit Issued: <u>1-10-2012</u> ✓	<u>5 1/2"</u>	<u>12516'</u>	<u>12516'</u>	<u>2380 Cu. Ft.</u>
Date Well Work Commenced: <u>2-18-2012</u>				
Date Well Work Completed: <u>6-9-2012</u>				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): <u>7860'(cement plug@ 7023'-7844')</u>				
Total Measured Depth (ft): <u>12520'</u>				
Fresh Water Depth (ft.): <u>220'</u>				
Salt Water Depth (ft.): <u>1200'</u>				
Is coal being mined in area (N/Y)? <u>N</u>				
Coal Depths (ft.): <u>227'</u>				
Void(s) encountered (N/Y) Depth(s) <u>Y 227'</u>				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation Marcellus Pay zone depth (ft) 7,975'-12,388'

Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d

Final open flow 1,967* MCF/d Final open flow 0 Bbl/d

Time of open flow between initial and final tests 77 Hours *Calculated

Static rock Pressure 4,887* psig (surface pressure) after _____ Hours

Second producing formation _____ Pay zone depth (ft) _____

Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d

Final open flow _____ MCF/d Final open flow _____ Bbl/d

Time of open flow between initial and final tests _____ Hours

Static rock Pressure _____ psig (surface pressure) after _____ Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Marlene Williams
Signature

9-13-2012
Date

2012-09-13
Office of Oil and Gas

SEP 14 2012

WV Dept of Environmental Protection
Office of Oil and Gas

Were core samples taken? Yes _____ No X

Were cuttings caught during drilling? Yes _____ No X

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list GR, neutron, density, and resistivity
open hole logs run from 0' - 7,860' MD; LWD GR from 7,100' - 12,459' MD.

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

(See Attached)

Plug Back Details Including Plug Type and Depth(s): Cement plug @ 7023' - 7844'

<u>Formations Encountered:</u>	<u>Top Depth</u>	<u>/</u>	<u>Bottom Depth</u>
<u>Surface:</u>			

(See Attached)

RECEIVED
Office of Oil and Gas

SEP 14 2012

WV Dept. of Environmental Protection

Well Number and Name: 834043 Wesbanco Bank MRN 8H

100-100
 100-100

SEP 14 2017

U.S. Department of
Environmental Protection

VERTICAL PILOT HOLE

Formation/Lithology	Top Depth, TVD/MD (ft)	Bottom Depth, TVD/MD (ft)
LS/SS	0	227
COAL	227	235
LS/SS	235	360
SH/SILTSTONE	360	390
LS	390	420
SH	420	450
SS	450	480
SH/SILTSTONE	480	510
SILTSTONE	510	570
SS	570	630
SH/SILTSTONE	630	690
SS	690	750
LS/SH/SS	750	780
SH	780	810
SH/SILT/SS	810	960
SS	960	1140
SH/SS	1140	1260
SS	1260	1350
SH/SS	1350	1380
LS/SH/SS	1380	1410
BIG LIME (LS)	1410	1530
BIG INJUN (SS)	1530	1740
SH/SILT/SS	1740	1985
BEREA (SS)	1985	2650
SHALE/SILTSTONE	2650	7369
GENESEO	7369	7404
TULLY	7404	7467
HAMILTON	7467	7662
MARCELLUS	7662	7782
ONONDAGA (LS)	7782	
TD OF PILOT HOLE		7860

**LATERAL SIDETRACK
WELLBORE**

Formation/Lithology	Top Depth, MD (ft)	Top Depth, TVD (ft)	Bottom Depth, MD (ft)	Bottom Depth, TVD (ft)
LS/SS	0	0	227	227
COAL	227	227	235	235
LS/SS	235	235	360	360
SH/SILTSTONE	360	360	390	390
LS	390	390	420	420
SH	420	420	450	450
SS	450	450	480	480
SH/SILTSTONE	480	480	510	510
SILTSTONE	510	510	570	570
SS	570	570	630	630
SH/SILTSTONE	630	630	690	690
SS	690	690	750	750
LS/SH/SS	750	750	780	780
SH	780	780	810	810
SH/SILT/SS	810	810	960	960
SS	960	960	1140	1140
SH/SS	1140	1140	1260	1260
SS	1260	1260	1350	1350
SH/SS	1350	1350	1380	1380
LS/SH/SS	1380	1380	1410	1410
BIG LIME (LS)	1410	1410	1530	1530
BIG INJUN (SS)	1530	1530	1740	1740
SH/SILT/SS	1740	1740	1985	1985
BEREA (SS)	1985	1985	2650	2650
SH/SILTSTONE	2650	2650	7359	7348
GENESEO	7359	7348	7410	7395
TULLY	7410	7395	7533	7504
HAMILTON	7533	7504	7731	7645
MARCELLUS	7731	7645	7731	7645
TD OF LATERAL			12520	7524

RECEIVED
Office of Oil and Gas

SEP 14 2017

WV Department of
Environmental Protection

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 2-8-2012
API #: 47-051-01296

Farm name: Shawn Harlan Operator Well No.: 3H (831189)

LOCATION: Elevation: 1397' Quadrangle: Littleton

District: Liberty County: Marshall
Latitude: 11350' Feet South of 39 Deg. 45 Min. 00 Sec.
Longitude 5840' Feet West of 80 Deg. 37 Min. 30 Sec.

Company: Chesapeake Appalachia, L.L.C.

Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
<u>P.O. Box 18496</u>				
<u>Oklahoma City, OK 73154-0496</u>	<u>13 3/8"</u>	<u>1242'</u>	<u>1242'</u>	<u>1352 cf</u>
Agent: <u>Eric Gillespie</u>	<u>9 5/8"</u>	<u>2715'</u>	<u>2715'</u>	<u>856 cf</u>
Inspector: <u>Bill Hatfield</u>	<u>5 1/2"</u>	<u>11911'</u>	<u>11911'</u>	<u>2838 cf</u>
Date Permit Issued: <u>8/25/2009</u>				
Date Well Work Commenced: <u>2/13/2011</u>				
Date Well Work Completed: <u>4/28/2011</u>				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): <u>7,153'</u>				
Total Measured Depth (ft): <u>11,914'</u>				
Fresh Water Depth (ft.): <u>395'</u>				
Salt Water Depth (ft.): <u>N/A</u>				
Is coal being mined in area (N/Y)? <u>N</u>				
Coal Depths (ft.): <u>450'</u>				
Void(s) encountered (N/Y) Depth(s) <u>N</u>				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation Marcellus Pay zone depth (ft) 7,444'-11,766'

Gas: Initial open flow 7,724 MCF/d Oil: Initial open flow 22 Bbl/d

Final open flow _____ MCF/d Final open flow _____ Bbl/d

Time of open flow between initial and final tests _____ Hours

Static rock Pressure 4,649 psig (surface pressure) after _____ Hours

Second producing formation _____ Pay zone depth (ft) _____

Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d

Final open flow _____ MCF/d Final open flow _____ Bbl/d

Time of open flow between initial and final tests _____ Hours

Static rock Pressure _____ psig (surface pressure) after _____ Hours

RECEIVED
Office of Oil & Gas

MAR 20 2012

WV Department of
Environmental Protection

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Marlene Williams
Signature

3-19-2012
Date

Were core samples taken? Yes _____ No N

Were cuttings caught during drilling? Yes Y No _____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list GR, neutron, density, and resistivity
open hole logs run from 0-7014' MD; LWD GR from 6600-11914' MD.

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

See Attached

Plug Back Details Including Plug Type and Depth(s): Cement -11,816'

<u>Formations Encountered:</u>	<u>Top Depth</u>	<u>Bottom Depth</u>
<u>Surface:</u>		

See Attached

RECEIVED
Office of Oil & Gas
MAR 29 2012
WV Department of
Environmental Protection

Formation/Lithology	Top Depth (ft)	Bottom Depth (ft)
SHALE/LS	0	450
SS	450	510
COAL	510	540
SHALE/SS	540	850
LS/SHALE	850	1105
Pittsburg Coal	1105	1125
LS/SHALE	1125	1160
SHALE	1160	1680
COAL	1680	1710
SHALE	1710	2150
SHALE/SS	2150	2236
Big Lime	2236	2268
Big Injun	2268	2506
SHALE/SS	2506	7040
Geneseo	7040	7061
Tully	7061	7170
Hamilton	7170	7268
Marcellus	7268	11914

RECEIVED
 Office of Oil & Gas
 MAR 20 2012
 W/ DEPARTMENT OF
 Environmental Protection

PERFORATION RECORD ATTACHMENT

Well Name and Number: Shawn Harlan 3H (831189)

[illegible]

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 9-11-2012
API #: 47-051-01447

Farm name: Van Aston MSH 1H Operator Well No.: 833044

LOCATION: Elevation: 1,181' Quadrangle: Glen Easton

District: Cameron County: Marshall
Latitude: 7,140' Feet South of 39 Deg. 52 Min. 30 Sec.
Longitude 9,790' Feet West of 80 Deg. 37 Min. 30 Sec.

Company: Chesapeake Appalachia, L.L.C.

Address: <u>P.O. Box 18496</u>	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
<u>Oklahoma City, OK 73154-0496</u>	<u>20"</u>	<u>88'</u>	<u>88'</u>	<u>297 Cu. Ft.</u>
Agent: <u>Eric Gillespie</u>	<u>13 3/8"</u>	<u>849'</u>	<u>849'</u>	<u>925 Cu. Ft.</u>
Inspector: <u>Derek Haught</u>	<u>9 5/8"</u>	<u>2,755'</u>	<u>2,755'</u>	<u>1329 Cu. Ft.</u>
Date Permit Issued: <u>4-25-2011</u>	<u>5 1/2"</u>	<u>14,484'</u>	<u>14,484'</u>	<u>3629 Cu. Ft.</u>
Date Well Work Commenced: <u>1-10-2012</u>				
Date Well Work Completed: <u>4-23-2012</u>				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): <u>6,624' (cement plugs @ 5700' & 6121')</u>				
Total Measured Depth (ft): <u>14,484'</u>				
Fresh Water Depth (ft.): <u>200'</u>				
Salt Water Depth (ft.): <u>None</u>				
Is coal being mined in area (N/Y)? <u>N</u>				
Coal Depths (ft.): <u>780'</u>				
Void(s) encountered (N/Y) Depth(s) <u>N</u>				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation Marcellus Pay zone depth (ft) 7,150' - 14,351'

Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d

Final open flow 3,332* MCF/d Final open flow 59 Bbl/d

Time of open flow between initial and final tests 77 Hours *Calculated

Static rock Pressure 4,259* psig (surface pressure) after _____ Hours

Second producing formation _____ Pay zone depth (ft) _____

Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d

Final open flow _____ MCF/d Final open flow _____ Bbl/d

Time of open flow between initial and final tests _____ Hours

Static rock Pressure _____ psig (surface pressure) after _____ Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Marlene Williams
Signature

9-11-2012
Date

Were cuttings caught during drilling? Yes X No

Resistivity, Nuclear, Spectral GR, Dipole Sonic, Borehole image, and MWD GR in vertical. MWD GR in lateral

Perforated Intervals, Fracturing, or Stimulating:

Plug Back Details Including Plug Type and Depth(s): Cement plugs @ 5,700' - 6,600' and 6,121' - 6,841'

Surface:

Well Number and Name: 833044 Van Aston MSH 1H

[illegible]

VERTICAL PILOT HOLE

Formation/Lithology	Top Depth, MD (ft)	Top Depth, TVD (ft)	Bottom Depth, MD (ft)	Bottom Depth, TVD (ft)
SHALE/LS	0	0	128	128
LS/SHALE	128	128	200	200
LS/SS	200	200	260	260
LS/SHALE	260	260	450	450
SHALE/LS	450	450	500	500
SHALE/LS	500	500	764	764
LS/COAL	764	764	772	772
LS	772	772	778	778
PITTSBURGH COAL	778	778	788	788
LS/SHALE	788	788	880	880
LS	880	880	1000	1000
LS/SHALE	1000	1000	1060	1060
SHALE/LS	1060	1060	1300	1300
SHALE	1300	1300	1410	1410
SHALE/SS	1410	1410	1500	1500
SS/SHALE	1500	1500	1660	1660
SS	1660	1660	1760	1760
SS/LS	1760	1760	1790	1790
BIG LIME	1790	1790	1824	1824
BIG INJUN	1824	1824	2086	2086
SHALE	2086	2086	2110	2110
SS/LS	2110	2110	2170	2170
SS	2170	2170	2330	2330
SS/SHALE	2330	2330	2350	2350
SS	2350	2350	2420	2420
SHALE/SS	2420	2420	2530	2530
SHALE/LS	2530	2530	2560	2560
SHALE/SS	2560	2560	2680	2680
SHALE/LS	2680	2680	2710	2710
SHALE/SS	2710	2710	2830	2830
SHALE	2830	2830	5580	5580
SHALE/LS	5580	5580	5700	5700
SHALE	5700	5700	6580	6341
MIDDLESEX	6580	6341	6662	6423
GENESEO	6662	6423	6682	6443
TULLY	6682	6443	6708	6469
HAMILTON	6708	6469	6803	6563
MARCELLUS	6803	6563	6854	6614
ONONDAGA	6854	6614	6864	6624
TD	6864	6624		

PLUGBACK DEPTH 6114 5907

LATERAL WELLBORE

Maximum TVD of wellbore: 6592 ft TVD @ 7206 ft MD

Formation/Lithology	Top Depth, MD (ft)	Top Depth, TVD (ft)	Bottom Depth, MD (ft)	Bottom Depth, TVD (ft)
SHALE	6114	5907	6433	6187
MIDDLESEX	6433	6187	6745	6422
GENESEO	6745	6422	6771	6439
TULLY	6771	6439	6816	6466
HAMILTON	6816	6466	7010	6556
MARCELLUS	7010	6556	14484	6519
TD	14484	6519		0

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 9-18-2012
API #: 47-051-01493

Farm name: Robert Young MSH 8H

Operator Well No.: 833798

RECEIVED
Office of Oil & Gas

LOCATION: Elevation: 1,240'

Quadrangle: 486-Moundsville

SEP 19 2012

District: Webster

County: Marshall

Latitude: 2360 Feet South of 39 Deg. 57 Min. 30 Sec.

Longitude 10130 Feet West of 80 Deg. 37 Min. 30 Sec.

WV Department of
Environmental Protection

Company: Chesapeake Appalachia, L.L.C.

Address: P.O. Box 18496	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Oklahoma City, OK 73154-0496	20"	100'	100'	314 Cu. Ft.
Agent: Eric Gillespie	13 3/8"	864'	864'	982 Cu. Ft.
Inspector: Bill Hendershot	9 5/8"	2520'	2520'	1111 Cu. Ft.
Date Permit Issued: 10-24-2011	5 1/2"	12841	12841'	3143 Cu. Ft.
Date Well Work Commenced: 4-7-2012				
Date Well Work Completed: 6-18-2012				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): 6702' (cement plug @ 5656'-6706')				
Total Measured Depth (ft): 12841'				
Fresh Water Depth (ft.): 310'				
Salt Water Depth (ft.): N/A				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 710				
Void(s) encountered (N/Y) Depth(s) N				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation Marcellus Pay zone depth (ft) 6,800'-12,702'

Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d

Final open flow 2,387 MCF/d Final open flow 53 Bbl/d

Time of open flow between initial and final tests 57 Hours

Static rock Pressure 4,272 psig (surface pressure) after Hours

Second producing formation Pay zone depth (ft)

Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d

Final open flow MCF/d Final open flow Bbl/d

Time of open flow between initial and final tests Hours

Static rock Pressure psig (surface pressure) after Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Mallene Williams
Signature

9-18-2012
Date

Were core samples taken? Yes X No _____

Were cuttings caught during drilling? Yes _____ No X

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list GR, neutron, density, and resistivity
open hole logs run from 0' - 6,720' MD; sonic log from 5,540' - 6,721' MD and OBMI logs from 5,602' - 6,715' MD; LWD GR from 5,712' - 12,779' MD.

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

(See Attached)

Plug Back Details Including Plug Type and Depth(s): Cement plug @ 5656' - 6706'

<u>Formations Encountered:</u>	<u>Top Depth</u>	<u>/</u>	<u>Bottom Depth</u>
<u>Surface:</u>			

(See Attached)

Well Number and Name: 833798 Robert Young MSH 8H

[illegible]

VERTICAL PILOT HOLE

Formation/Lithology	Top Depth, TVD/MD (ft)	Bottom Depth, TVD/MD (ft)
SS/SILTSTONE	0	710
PITTSBURG COAL	710	720
SS	720	790
SH/SILTSTONE	790	1410
SS	1410	1530
SH/SILTSTONE	1530	2040
BIG INJUN (SS)	2040	2350
SH/SILTSTONE	2350	3810
SHALE	3810	6474
GENESEO (SH)	6474	6497
TULLY (LS)	6497	6528
HAMILTON (SH)	6528	6627
MARCELLUS (SH)	6627	6682
ONONDAGA (LS)	6682	
TD OF PILOT HOLE		6702

**LATERAL SIDETRACK
WELLBORE**

Formation/Lithology	Top Depth, MD (ft)	Top Depth, TVD (ft)	Bottom Depth, MD (ft)	Bottom Depth, TVD (ft)
SS/SILTSTONE	0	0	710	710
PITTSBURG COAL	710	710	720	720
SS	720	720	790	790
SH/SILTSTONE	790	790	1410	1410
SS	1410	1410	1530	1530
SH/SILTSTONE	1530	1530	2040	2040
BIG INJUN (SS)	2040	2040	2350	2350
SH/SILTSTONE	2350	2350	3810	3810
SHALE	3810	3810	6485	6332
GENESEO (SH)	6485	6332	6505	6348
TULLY (LS)	6505	6348	6547	6381
HAMILTON (SH)	6547	6381	6699	6467
MARCELLUS (SH)	6699	6467		
TD OF LATERAL			12841	6574

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas

DATE: 11/10/2011
APP No: 47-001-03220H
Lease No: DV014571; 071053; 070676;
70667; 70641; 70644

Well Operator's Report of Well Work

Farm Name: MCCAULEY, RANDALL & JUDY Operator Well No. PHL13AHS (406847)

LOCATION: Elevation: 1520'

Quadrangle: Philippi

District: Pleasant

County: Barbour

Latitude: 11,766 Feet South of: 39 Deg. 15 Min. 00 Sec.
Longitude: 15,389 Feet West of: 79 Deg. 57 Min. 30 Sec.

Company: CNX Gas Company LLC

	Casing and Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Address: <u>P.O. Box 1248</u>				
<u>Jane Lew, WV 26378</u>				
Agent: <u>Kent Wright</u>				
Inspector: <u>Bryan Harris</u>				
Date Permit Issued: <u>08/10/2011</u>				
Date Well Work Commenced: <u>10/25/2011</u>	<u>20"</u>	<u>100'</u>	<u>100'</u>	<u>Grouted In</u>
Date Well Work Completed: <u>11/12/2011</u>				
Verbal Plugging:	<u>13 3/8"</u>	<u>657.15'</u>	<u>657.15'</u>	<u>600 sks</u>
Date Permission granted on:				
Rotary Cable Rig <u>X</u>	<u>9 5/8"</u>	<u>2032'</u>	<u>2032'</u>	<u>630 sks</u>
Total Vertical Depth (feet): <u>7830'</u>				
Total Measured Depth (feet):				
Fresh Water Depth (ft.): <u>N/A</u>				
Salt Water Depth (ft.): <u>N/A</u>				
Is coal being mined in area (N/Y)? <u>No</u>				
Coal Depths (ft.): <u>190', 230', 310'</u>				
Void(s) encountered (N/Y) Depth(s)				

OPEN FLOW DATA 11/12/2011 - SET CEMENT PLUG WITH 615 SKS @ 6100'. VERTICAL AND HORIZONTAL DRILLING INCOMPLETE. PLAN ON RECONVENING THE VERTICAL AND HORIZONTAL DRILLING IN 2014.

Producing formation * No Fracture / Completion Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow _____ MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests 12 Hours
Static Rock Pressure _____ psig (surface pressure) after 12 Hours

Second Producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow * MCF/d Oil: Initial open flow * Bbl/d
Final open flow * MCF/d Final open flow * Bbl/d
Time of open flow between initial and final tests * Hours
Static rock Pressure * psig (surface pressure) after * Hours

*** COMMINGLED WITH PREVIOUS FORMATIONS**

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature

Date

WR-35

Rev (5-01)

Page 2 of 2

WELL: PHL13AHS (406847)

Were core samples taken? Yes ___ No X Were cuttings caught during drilling? Yes X No ___Were ___ Electrical, ___ Mechanical, X or Geophysical logs recorded on this well?

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

PERFORATED INTERVALS, FRACTURING, OR STIMULATING:

11/12/2011 NO FRACTURE.

VERTICAL AND HORIZONTAL DRILLING INCOMPLETE.

PLAN ON RECONVENING THE VERTICAL AND HORIZONTAL DRILLING IN 2014.

FORMATIONS ENCOUNTERED:

Fill	0	30	Sand/Shale	30	190	Coal	190	195	Sand/Clay	195	230
Sand/Shale	230	310	Coal	310	315	Sand/Shale	315	1045	Shale/Red Rock	1045	

GAMMA RAY FORMATION TOPS				
CONSIDERABLE			TOP	BASE
LITTLE LIME			1162	1170
BIG LIME			1186	1240
BIG INJUN			1240	1365
GANTZ			1550	1574
FOURTH SAND			2089	2118
WARREN			2520	2550
SPEECHLEY			2834	2873
BALLTOWN			2996	3024
RILEY			3720	3940
BENSON			4020	4085
FIRST ELK			4250	4302
SECOND ELK			4400	4480
THIRD ELK			4660	4680
FOURTH ELK			4934	4975
SYCAMORE GRIT			6298	6405
UN-NAMED SILTSTONE			6672	6760
FAULT			6803	
UN-NAMED SILTSTONE REPEAT			6850	6927
BURKETT			7339	7358
TULLY			7358	7419
HAMILTON			7419	7592
MARCELLUS			7592	7678
ONONDAGA			7678	7692
HUNTERSVILLE			7692	
TD			7830	

RECEIVED
Office of Oil & Gas
DEC 11 2012
WV Department of
Environmental Protection

NOTE: Well TD'd at 7830 ft and plugged back to 6100 ft with 615 sks Class A cement.

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: August 14, 2012
API #: 47-097-03801

Farm name: Hildred Sisk Operator Well No.: #1A-WV0444

LOCATION: Elevation: 1818 Quadrangle: Rock Cave 7.5'

District: Banks County: Upshur
Latitude: 38 Feet South of 52 Deg. 30 Min. Sec.
Longitude 80 Feet West of 17 Deg. 30 Min. Sec.

Company: Mountain V Oil & Gas, Inc.

Address: <u>PO Box 470</u>	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
<u>Bridgeport WV 26330</u>	<u>13 3/8"</u>	<u>31'</u>	<u>31'</u>	<u>sanded in</u>
Agent: <u>S. Michael Shaver</u>	<u>9 5/8"</u>	<u>546'</u>	<u>546'</u>	<u>200 sks</u>
Inspector: <u>Bill Hatfield</u>	<u>7"</u>	<u>2248'</u>	<u>2248'</u>	<u>310 sks</u>
Date Permit Issued: <u>6-15-2011</u>	<u>4 1/2"</u>	<u>7178'</u>	<u>7178'</u>	<u>150 sks</u>
Date Well Work Commenced: <u>8-6-12</u>				
Date Well Work Completed: <u>8-14-12</u>				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): <u>7'</u>				
Total Measured Depth (ft): <u>7195'</u>				
Fresh Water Depth (ft.): <u>64, 212</u>				
Salt Water Depth (ft.): <u>909', 1699' (oil)</u>				
Is coal being mined in area (N/Y)? <u>N</u>				
Coal Depths (ft.): <u>N/A</u>				
Void(s) encountered (N/Y) Depth(s) <u>N</u>				

RECEIVED
Office of Oil & Gas

SEP 21 2012

WV Department of
Environmental Protection

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation Marcellus Pay zone depth (ft)
Gas: Initial open flow Odor MCF/d Oil: Initial open flow N/A Bbl/d
Final open flow 298,000 MCF/d Final open flow Bbl/d
Time of open flow between initial and final tests 216 Hours
Static rock Pressure 940 psig (surface pressure) after 24 Hours

Second producing formation Pay zone depth (ft)
Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d
Final open flow MCF/d Final open flow Bbl/d
Time of open flow between initial and final tests Hours
Static rock Pressure psig (surface pressure) after Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

[Signature]
Signature

9-19-12
Date

Were cuttings caught during drilling? Yes^x_____ No_____

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforations: 7136-7161 100 holes

13944 bbls fluid

Formations Encountered: _____ **Top Depth** _____ / _____ **Bottom Depth** _____
Surface: _____

[illegible]

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 9-7-2012
API #: 47-061-01616

Farm name: Esther Clark 1H Operator Well No.: 832638

LOCATION: Elevation: 1424' Quadrangle: Hundred

District: Battelle County: Monongalia
Latitude: 5490' Feet South of 39 Deg. 40 Min. 00 Sec.
Longitude 5960' Feet West of 80 Deg. 22 Min. 30 Sec.

Company: Chesapeake Appalachia, L.L.C.

Address: <u>P.O. Box 18496</u>	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
<u>Oklahoma City, OK 73154-0496</u>	<u>20"</u>	<u>110'</u>	<u>110'</u>	<u>106 Cu. Ft.</u>
Agent: <u>Eric Gillespie</u>	<u>13 3/8"</u>	<u>525'</u>	<u>525'</u>	<u>623 Cu. Ft.</u>
Inspector: <u>Sam Ward</u>	<u>9 5/8"</u>	<u>3660'</u>	<u>3660'</u>	<u>1852 Cu. Ft.</u>
Date Permit Issued: <u>1-25-2011</u>	<u>5 1/2"</u>	<u>15657'</u>	<u>15657'</u>	<u>3357 Cu. Ft.</u>
Date Well Work Commenced: <u>12-10-2011</u>				
Date Well Work Completed: <u>3-26-2012</u>				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft.): <u>7962'</u>				
Total Measured Depth (ft.): <u>15674'</u>				
Fresh Water Depth (ft.): <u>400'</u>				
Salt Water Depth (ft.): <u>None</u>				
Is coal being mined in area (N/Y)? <u>Y</u>				
Coal Depths (ft.): <u>221', 1200'</u>				
Void(s) encountered (N/Y) Depth(s) <u>N</u>				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation Marcellus Pay zone depth (ft) 8,349'-15,536'

Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d

Final open flow 4011* MCF/d Final open flow 0 Bbl/d

Time of open flow between initial and final tests 77 Hours *Calculated

Static rock Pressure 5130* psig (surface pressure) after _____ Hours

Second producing formation _____ Pay zone depth (ft) _____

Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d

Final open flow _____ MCF/d Final open flow _____ Bbl/d

Time of open flow between initial and final tests _____ Hours

Static rock Pressure _____ psig (surface pressure) after _____ Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Mallory Williams
Signature

9-11-2012
Date

Were core samples taken? Yes _____ No X

Were cuttings caught during drilling? Yes ^X No

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list _____
MWD IN LATERAL

MWD IN LATERAL

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

(See Attached)

Plug Back Details Including Plug Type and Depth(s):

Formations Encountered: _____ Top Depth _____ / _____ Bottom Depth _____
Surface: _____

Surface:

(See Attached)

Well Number and Name: 832638 Esther Clark 1H

[illegible]

LATERAL WELLBORE**Maximum TVD of wellbore: 7962 ft TVD @ 8370 ft MD**

Formation/Lithology	Top Depth, MD (ft)	Top Depth, TVD (ft)	Bottom Depth, MD (ft)	Bottom Depth, TVD (ft)
SHALE	0	0	250	250
SANDSTONE/SHALE	250	250	500	500
SHALE	500	500	930	930
SANDSTONE	930	930	990	990
LIMESTONE/SHALE	990	990	1140	1140
COAL	1140	1140	1156	1156
COAL/LIMESTONE/SHALE	1156	1156	1240	1240
COAL	1240	1240	1260	1260
COAL/LIMESTONE/SHALE	1260	1260	1320	1320
SHALE	1320	1320	1600	1600
SANDSTONE/SHALE	1600	1600	2460	2460
BIG LIME	2640	2640	2550	2550
BIG INJUN SANDSTONE	2550	2550	2750	2750
SANDSTONE/SHALE	2750	2750	3210	3210
BEREA SANDSTONE	3210	3210	3550	3550
SHALE	3550	3550	4100	4100
SHALE/SANDSTONE	4100	4100	4580	4580
SHALE	4580	4580	7849	7749
GENESEO	7849	7749	7881	7775
TULLY	7881	7775	7911	7797
HAMILTON	7911	7797	8121	7914
MARCELLUS	8121	7914	15674	15674
TD	15674	7894		0

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 9-7-2012
API #: 47-061-01623

Farm name: Esther Clark 3H Operator Well No.: 833083

LOCATION: Elevation: 1424' Quadrangle: Hundred 7.5'

District: Battelle County: Monongalia
Latitude: 5484' Feet South of 39 Deg. 40 Min. 00 Sec.
Longitude 5973' Feet West of 80 Deg. 22 Min. 30 Sec.

Company: Chesapeake Appalachia, L.L.C.

Address: <u>P.O. Box 18496</u>	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
<u>Oklahoma City, OK 73154-0496</u>	<u>20"</u>	<u>110'</u>	<u>110'</u>	<u>101 Cu. Ft.</u>
Agent: <u>Eric Gillespie</u>	<u>13 3/8"</u>	<u>580'</u>	<u>580'</u>	<u>684 Cu. Ft.</u>
Inspector: <u>Sam Ward</u>	<u>9 5/8"</u>	<u>3672'</u>	<u>3672'</u>	<u>1667 Cu. Ft.</u>
Date Permit Issued: <u>6/3/2011</u>	<u>5 1/2"</u>	<u>15136'</u>	<u>15136'</u>	<u>3317 Cu. Ft.</u>
Date Well Work Commenced: <u>10/18/2011</u>				
Date Well Work Completed: <u>3/25/2012</u>				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): <u>8183'(cement plug 6,992 - 8183')</u>				
Total Measured Depth (ft): <u>15139'</u>				
Fresh Water Depth (ft.): <u>400'</u>				
Salt Water Depth (ft.): <u>None</u>				
Is coal being mined in area (N/Y)? <u>Y</u>				
Coal Depths (ft.): <u>221', 1200'</u>				
Void(s) encountered (N/Y) Depth(s) <u>N</u>				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation Marcellus Pay zone depth (ft) 8,300' - 15,004'

Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d

Final open flow 5010* MCF/d Final open flow 0 Bbl/d

Time of open flow between initial and final tests 47 Hours * Calculated

Static rock Pressure 5153* psig (surface pressure) after _____ Hours

Second producing formation _____ Pay zone depth (ft) _____

Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d

Final open flow _____ MCF/d Final open flow _____ Bbl/d

Time of open flow between initial and final tests _____ Hours

Static rock Pressure _____ psig (surface pressure) after _____ Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Marlene Williams
Signature

9-11-2012
Date

Were cuttings caught during drilling? Yes^X_____ No_____

Triple Combo, spectral gamma ray, borehole image and dipole sonic in pilot and MWD gamma ray in lateral

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Plug Back Details Including Plug Type and Depth(s): **Cement plug @ 6992' - 8183'**

Formations Encountered: _____ **Top Depth** _____ / _____ **Bottom Depth** _____
Surface: _____

see attached

VERTICAL PILOT HOLE

Formation/Lithology	Top Depth, MD (ft)	Top Depth, TVD (ft)	Bottom Depth, MD (ft)	Bottom Depth, TVD (ft)
SHALE	0		250	
SANDSTONE/SHALE	250		500	
SHALE	500		930	
SANDSTONE	930		990	
LIMESTONE/SHALE	990		1140	
COAL	1140		1156	
COAL/LIMESTONE/SHALE	1156		1240	
COAL	1240		1260	
COAL/LIMESTONE/SHALE	1260		1320	
SHALE	1320		1600	
SANDSTONE/SHALE	1600		2640	
BIG LIME	2640		2550	
BIG INJUN SANDSTONE	2550		2750	
SANDSTONE/SHALE	2750		3210	
BEREA SANDSTONE	3210		3550	
SHALE	3550		4100	
SHALE/SANDSTONE	4100		4580	
SHALE	4580		7744	
GENESEO	7744		7782	
TULLY	7782		7820	
HAMILTON	7820		7924	
MARCELLUS	7924		7994	
ONONDAGA	7994			
PILOT TD	8183			
PLUG BACK DEPTH	7107			

LATERAL WELLBORE

Maximum TVD of wellbore: 7972 ft TVD @ 13289 ft MD

Formation/Lithology	Top Depth, MD (ft)	Top Depth, TVD (ft)	Bottom Depth, MD (ft)	Bottom Depth, TVD (ft)
SHALE	0	0	250	250

SANDSTONE/SHALE	250	250	500	500
SHALE	500	500	930	930
SANDSTONE	930	930	990	990
LIMESTONE/SHALE	990	990	1140	1140
COAL	1140	1140	1156	1156
COAL/LIMESTONE/SHALE	1156	1156	1240	1240
COAL	1240	1240	1260	1260
COAL/LIMESTONE/SHALE	1260	1260	1320	1320
SHALE	1320	1320	1600	1600
SANDSTONE/SHALE	1600	1600	2460	2460
BIG LIME	2640	2640	2550	2550
BIG INJUN SANDSTONE	2550	2550	2750	2750
SANDSTONE/SHALE	2750	2750	3210	3210
BEREA SANDSTONE	3210	3210	3550	3550
SHALE	3550	3550	4100	4100
SHALE/SANDSTONE	4100	4100	4580	4580
SHALE	4580	4580	7764	7730
GENESEO	7764	7730	7821	7774
TULLY	7821	7774	7854	7798
HAMILTON	7854	7798	8074	7910
MARCELLUS	8074	7910	15139	7905
LATERAL TD	15139	7905		0

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 11-16-2012
API #: 47-069-00066

Farm name: Larry Ball 6H Operator Well No.: 832769

LOCATION: Elevation: 1330' Quadrangle: Bethany WV

District: Liberty County: Ohio
Latitude: 10110' Feet South of 40 Deg. 12 Min. 30 Sec.
Longitude 15140 Feet West of 80 Deg. 32 Min. 30 Sec.

Company: Chesapeake Appalachia, L.L.C.

Address: P.O. Box 18496	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Oklahoma City, OK 73154-0496	20"	100'	100'	Driven
Agent: Eric Gillespie	13 3/8"	590'	590'	718 Cu. Ft.
Inspector: Bill Hendershot	9 5/8"	2051'	2051'	858 Cu. Ft.
Date Permit Issued: 1-14-2011	5 1/2"	13525'	13525'	2711 Cu. Ft.
Date Well Work Commenced: 4-16-2011				
Date Well Work Completed: 8-20-2012				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): 6341'				
Total Measured Depth (ft): 13523'				
Fresh Water Depth (ft.): 100'				
Salt Water Depth (ft.): 1545'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 540'				
Void(s) encountered (N/Y) Depth(s) N				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation Marcellus Pay zone depth (ft) 7,070-13,371

Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d

Final open flow Not Tested MCF/d Final open flow _____ Bbl/d

Time of open flow between initial and final tests _____ Hours

Static rock Pressure _____ psig (surface pressure) after _____ Hours

Second producing formation _____ Pay zone depth (ft) _____

Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d

Final open flow _____ MCF/d Final open flow _____ Bbl/d

Time of open flow between initial and final tests _____ Hours

Static rock Pressure _____ psig (surface pressure) after _____ Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Marlene Williams
Signature

11-19-2012
Date

RECEIVED
OFFICE OF OIL & GAS
2012 NOV 21 P 1:19
WV DEPARTMENT OF
ENVIRONMENTAL PROTECTION

Were core samples taken? Yes _____ No X

Were cuttings caught during drilling? Yes _____ No X

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list LWD GR from 4661' - 13472' MD

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

(See attached)

Plug Back Details Including Plug Type and Depth(s):

Formations Encountered:	Top Depth	/	Bottom Depth
Surface:			

(See attached)

LATERAL SIDETRACK WELLBORE (no vertical pilot hole associated with this well)

Maximum TVD of wellbore: 6341 ft TVD @ 13523 ft MD

Formation/Lithology	Top Depth, MD (ft)	Top Depth, TVD (ft)	Bottom Depth, MD (ft)	Bottom Depth, TVD (ft)
LS/SS	0	0	540	540
PITTSBURG COAL	540	540	553	553
SS/LS	553	553	1210	1210
SS	1210	1210	1380	1380
SS/SH	1380	1380	1600	1600
BIG INJUN (SS)	1600	1600	1869	1869
SHALE	1869	1869	6450	6036
GENESEO (SH)	6450	6036	6476	6051
TULLY (LS)	6476	6051	6574	6102
HAMILTON (SH)	6574	6102	6887	6204
MARCELLUS (SH)	6887	6204		
TD OF LATERAL			13523	6341

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 11-16-2012
API #: 47-069-00067

Farm name: Larry Ball OHI 5H Operator Well No.: 832770

LOCATION: Elevation: 1340' Quadrangle: Bethany

District: Liberty County: Ohio
Latitude: 10090' Feet South of 40 Deg. 12 Min. 30 Sec.
Longitude 15150' Feet West of 80 Deg. 32 Min. 30 Sec.

Company: Chesapeake Appalachia, L.L.C.

Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
P.O. Box 18496				
Oklahoma City, OK 73154-0496	13 3/8"	607'	607'	673 Cu. Ft.
Agent: Eric Gillespie	9 5/8"	2036'	2036'	898 Cu. Ft.
Inspector: Bill Hendershot	5 1/2"	15173'	15173'	3991 Cu. Ft.
Date Permit Issued: 1-26-2011				
Date Well Work Commenced: 12/30/2011				
Date Well Work Completed: 8-20-2012				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): 6266'				
Total Measured Depth (ft): 15176'				
Fresh Water Depth (ft.): 100'				
Salt Water Depth (ft.): 1545'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 547'				
Void(s) encountered (N/Y) Depth(s) N				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation Marcellus Pay zone depth (ft) 6,900-15,031

Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow 2075* MCF/d Final open flow 277 Bbl/d
Time of open flow between initial and final tests 50 Hours *Calculated
Static rock Pressure 4035* psig (surface pressure) after _____ Hours

Second producing formation _____ Pay zone depth (ft) _____

Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete.

Marlene Williams
Signature

11-19-2012
Date

RECEIVED
OFFICE OF OIL & GAS
2012 NOV 21 P 1:19
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Were core samples taken? Yes _____ No X

Were cuttings caught during drilling? Yes _____ No X

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list LWD GR from 5734' - 15119' MD

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

(See attached)

Plug Back Details Including Plug Type and Depth(s):

Formations Encountered:
Surface:

Top Depth

/

Bottom Depth

(See attached)

Well Number and Name: 832770 Larry Ball OHI 5H

[illegible]

LATERAL SIDETRACK WELLBORE (no vertical pilot hole associated with this well)**Maximum TVD of wellbore: 6266 ft TVD @ 8277 ft MD**

Formation/Lithology	Top Depth, MD (ft)	Top Depth, TVD (ft)	Bottom Depth, MD (ft)	Bottom Depth, TVD (ft)
LS/SS	0	0	547	547
PITTSBURG COAL	547	547	557	557
SS/LS	557	557	580	580
SS	580	580	610	610
SH	610	610	670	670
SS	670	670	730	730
LS/SS	730	730	910	910
LS	910	910	972	972
LS/SS	972	972	1160	1160
SS	1160	1160	1390	1390
SS/SH	1390	1390	1670	1670
BIG INJUN (SS)	1670	1670	1887	1887
SHALE	1887	1887	6279	6065
GENESEO (SH)	6279	6065	6302	6083
TULLY (LS)	6302	6083	6369	6134
HAMILTON (SH)	6369	6134	6811	6229
MARCELLUS (SH)	6811	6229		
TD OF LATERAL			15176	6179

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 2-1-2012
API #: 47-069-00075 REVISED

Farm name: Dallas Hall Operator Well No.: 6H

LOCATION: Elevation: 1270' Quadrangle: Bethany WV

District: Liberty County: Ohio
Latitude: 8270' Feet South of 40 Deg. 10 Min. 00 Sec.
Longitude 12180' Feet West of 80 Deg. 35 Min. 00 Sec.

Company: Chesapeake Appalachia, L.L.C.

Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
<u>P.O. Box 18496</u>	<u>20"</u>	<u>75'</u>	<u>75'</u>	<u>Driven</u>
<u>Oklahoma City, OK 73154-0496</u>	<u>13 3/8"</u>	<u>546'</u>	<u>546'</u>	<u>590 cf</u>
Agent: <u>Eric Gillespie</u>	<u>9 5/8"</u>	<u>2026'</u>	<u>2026'</u>	<u>931cf</u>
Inspector: <u>Bill Hendershot</u>	<u>5 1/2"</u>	<u>12486'</u>	<u>12486'</u>	<u>2443 cf</u>
Date Permit Issued: <u>2/15/2011</u>				
Date Well Work Commenced: <u>6/5/2011</u>				
Date Well Work Completed: <u>12/16/2011</u>				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): <u>6,215'</u>				
Total Measured Depth (ft): <u>12,503'</u>				
Fresh Water Depth (ft.): <u>30'</u>				
Salt Water Depth (ft.): <u>1035'</u>				
Is coal being mined in area (N/Y)? <u>N</u>				
Coal Depths (ft.): <u>446'</u>				
Void(s) encountered (N/Y) Depth(s) <u>Y 446'</u>				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation Marcellus Pay zone depth (ft) 8,730'-12,337'

Gas: Initial open flow 1,092 MCF/d Oil: Initial open flow 126 Bbl/d

Final open flow _____ MCF/d Final open flow _____ Bbl/d

Time of open flow between initial and final tests _____ Hours

Static rock Pressure 4,040 psig (surface pressure) after _____ Hours

Second producing formation _____ Pay zone depth (ft) _____

Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d

Final open flow _____ MCF/d Final open flow _____ Bbl/d

Time of open flow between initial and final tests _____ Hours

Static rock Pressure _____ psig (surface pressure) after _____ Hours

RECEIVED
Office of Oil & Gas

MAR 20 2012

WV Department of
Environmental Protection

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Marlene Williams
Signature

3-16-2012
Date

Were core samples taken? Yes _____ No N

Were cuttings caught during drilling? Yes Y No _____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list _____
LWD GR from 5691-12444' MD

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

(See Attached)

Plug Back Details Including Plug Type and Depth(s): Cement @ 12,385'

<u>Formations Encountered:</u>	<u>Top Depth</u>	<u>/</u>	<u>Bottom Depth</u>
<u>Surface:</u>			

(See Attached)

RECEIVED
Office of Oil & Gas

MAR 20 2012

WV Department of
Environmental Protection

LITHOLOGY	TOP DEPTH (FT)	BOTTOM DEPTH (FT)
LS/SHALE	0	450
Pittsburg Coal	446	456
SS	456	650
SHALE	650	950
SS/SHALE	950	1100
SHALE	1100	1250
SHALE/SS	1250	1400
SHALE	1400	1470
Big Lime	1470	1620
Big Injun	1620	1950
SHALE/SS	1950	2250
SHALE	2250	6135
Geneseo	6135	6163
Tully	6163	6245
Hamilton	6245	6462
Marcellus	6462	12500

RECEIVED
 Office of Oil & Gas
 MAR 20 2012
 NEW YORK DEPARTMENT OF
 ENVIRONMENTAL CONSERVATION

Well Name and Number: Dallas Hall 6H (833097)

[illegible]

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 9-13-2012
API #: 47-069-00084

Farm name: Roy Riggle 8H Operator Well No.: 833123

LOCATION: Elevation: 1,250' Quadrangle: Bethany, WV

District: Liberty County: Ohio
Latitude: 6,700' Feet South of 40 Deg. 10 Min. 00 Sec.
Longitude 5,540' Feet West of 80 Deg. 30 Min. 00 Sec.

Company: Chesapeake Appalachia, L.L.C.

Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
P.O. Box 18496				
Oklahoma City, OK 73154-0496	20"	75'	75'	263 Cu. Ft.
Agent: Eric Gillespie	13 3/8"	655'	655'	757 Cu. Ft.
Inspector: Bill Hendershot	9 5/8"	2,190'	2,190'	976 Cu. Ft.
Date Permit Issued: 5-20-2011	5 1/2"	11,472'	11,472'	2458 Cu. Ft.
Date Well Work Commenced: 7-9-2011				
Date Well Work Completed: 5-23-2012				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): 6,505'(cement plug@ 5770' - 6505')				
Total Measured Depth (ft): 11,527'				
Fresh Water Depth (ft.): 150'				
Salt Water Depth (ft.): 700'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 628'				
Void(s) encountered (N/Y) Depth(s) N				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation Marcellus Pay zone depth (ft) 6,750'-11,331'

Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d

Final open flow 1,241* MCF/d Final open flow 127 Bbl/d

Time of open flow between initial and final tests 48 Hours *Calculated

Static rock Pressure 4,210* psig (surface pressure) after _____ Hours

Office of Oil and Gas

SEP 14 2012

WV Department of
Environmental Protection

Second producing formation _____ Pay zone depth (ft) _____

Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d

Final open flow _____ MCF/d Final open flow _____ Bbl/d

Time of open flow between initial and final tests _____ Hours

Static rock Pressure _____ psig (surface pressure) after _____ Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Marlene Williams
Signature

9-13-2012
Date

Were core samples taken? Yes _____ No X

Were cuttings caught during drilling? Yes _____ No X

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list GR, neutron, density, and resistivity
open hole logs run from 0' - 6,505' MD; LWD GR from 5,640' - 11,416' MD.

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

(See Attached)

Plug Back Details Including Plug Type and Depth(s): Cement plug @ 5770' - 6505'

<u>Formations Encountered:</u>	<u>Top Depth</u>	<u>/</u>	<u>Bottom Depth</u>
<u>Surface:</u>			

(See Attached)

RECEIVED
Office of the
Secretary of the
State

SEP 14 2011

10/1/11

VERTICAL PILOT HOLE

Formation/Lithology	Top Depth, TVD/MD (ft)	Bottom Depth, TVD/MD (ft)
LS/SH	0	628
PITTSBURG COAL	628	635
LS/SH/SS	635	1520
LS/SH	1520	1692
BIG INJUN (SS)	1692	1980
SHALE	1980	6240
GENESEO (SH)	6240	6264
TULLY (LS)	6264	6302
HAMILTON (SH)	6302	6414
MARCELLUS (SH)	6414	6486
ONONDAGA (LS)	6486	
TD OF PILOT HOLE		6505

**LATERAL SIDETRACK
WELLBORE**

Formation/Lithology	Top Depth, MD (ft)	Top Depth, TVD (ft)	Bottom Depth, MD (ft)	Bottom Depth, TVD (ft)
LS/SH	0	0	628	628
PITTSBURG COAL	628	628	635	635
LS/SH/SS	635	635	1520	1520
LS/SH	1520	1520	1692	1692
BIG INJUN (SS)	1692	1692	1980	1980
SHALE	1980	1980	6270	6250
GENESEO (SH)	6270	6250	6293	6270
TULLY (LS)	6293	6270	6345	6312
HAMILTON (SH)	6345	6312	6539	6434
MARCELLUS (SH)	6539	6434		
TD OF LATERAL			11527	6478

RECEIVED
Office of Oil and Gas

SEP 14 2011

NY Department of
Environmental Conservation

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas

DATE: 03/23/12
APN No: 47-001-00221H
Lease No: 071053; DV014571; 070576;
70667; 70641

Well Operator's Report of Well Work

Farm Name: MCCAULEY, RANDALL & JUDY Operator Well No. PHL13BHS (406849)

LOCATION: Elevation: 1520' Quadrangle: Philippi

District: Pleasant

County: Barbour

Latitude: 11.837 Feet South of: 39 Deg. 15 Min. 00 Sec. **RECEIVED**
Longitude: 3.607 Feet West of: 80 Deg. 00 Min. 00 **Office of Oil & Gas**

Company: CNX Gas Company LLC

	Casing and Tubing	Used in drilling	Left in well	Grouted in up Cu. Ft.
Address: <u>P.O. Box 1248</u>				
<u>Jane Lew, WV 26378</u>				
Agent: <u>Kent Wright</u>				
Inspector: <u>Bryan Harris</u>				
Date Permit Issued: <u>02/14/2011</u>				
Date Well Work Commenced: <u>10/08/2011</u>	<u>20"</u>	<u>100'</u>	<u>100'</u>	<u>Grouted in</u>
Date Well Work Completed: <u>03/23/2012</u>				
Verbal Plugging:	<u>13 3/8"</u>	<u>663'</u>	<u>663'</u>	<u>550 sks</u>
Date Permission granted on:				
Rotary <u>Cable</u> Ris <u>X</u>	<u>9 5/8"</u>	<u>2022'</u>	<u>2022'</u>	<u>652 sks</u>
Total Vertical Depth (feet): <u>6663'</u>				
Total Measured Depth (feet):				
Fresh Water Depth (ft.): <u>30'</u>				
Salt Water Depth (ft.): <u>N/A</u>				
Is coal being mined in area (N/Y)? <u>No</u>				
Coal Depths (ft.): <u>190', 230', 310'</u>				
Void(s) encountered (N/Y) Depth(s):				

OPEN FLOW DATA 03/23/2012 - VERTICAL AND HORIZONTAL DRILLING INCOMPLETE. PLAN ON
RECONVENING THE VERTICAL AND HORIZONTAL DRILLING IN 2014.

Producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow _____ MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests _____ 12 Hours
Static Rock Pressure _____ psig (surface pressure) after 12 Hours

Second Producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow * _____ MCF/d Oil: Initial open flow * _____ Bbl/d
Final open flow * _____ MCF/d Final open flow * _____ Bbl/d
Time of open flow between initial and final tests _____ * Hours
Static rock Pressure * _____ psig (surface pressure) after * Hours

*** COMMINGLED WITH PREVIOUS FORMATIONS**

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature

Date

Page 2 of 2

Were Electrical, Mechanical, X or Geophysical logs recorded on this well?

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

3/23/2012 NO FRACTURE.

VERTICAL AND HORIZONTAL DRILLING INCOMPLETE.

PLAN ON RECONVENING THE VERTICAL AND HORIZONTAL DRILLING IN 2014.

FORMATIONS ENCOUNTERED:

Fill	0	30	Sand/Shale	30	190	Coal	190	195	Sand/Clay	195	230
Sand/Shale	230	310	Coal	310	315	Sand/Shale	315	1045	Shale/RedRock	1045	
Limestone/Shale	1250	1325	Limestone/Sand	1325	1600	Sand/Shale	1600				

	TOP	BASE
LITTLE LIME	1162	1170
BIG LIME	1188	1240
BIG INJUN	1240	1365
GANTZ	1550	1574
FOURTH SAND	2089	2118
WARREN	2520	2550
SPEECHLEY	2834	2873
BALLTOWN	2996	3024
RILEY	3720	3940
BENSON	4020	4085
FIRST ELK	4250	4302
SECOND ELK	4400	4480
THIRD ELK	4660	4680
FOURTH ELK	4934	4975
SYCAMORE GRIT	6298	6405
UN-NAMED SILTSTONE	6663	

RECEIVED
Office of Oil & Gas
 DEC 10 2012
 WV Department
 Environmental Protection

RECEIVED
Office of Oil & Gas

DEC 10 2012

WV Department of
Environmental Protection

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas

DATE: 12/10/2012
APN No: 47-061-03223R 001.05222
Lease No: 071053; DV014571; 070676;
70667; 70641

Well Operator's Report of Well Work

Farm Name: MCCAULEY, RANDALL & JUDY Operator Well No. PHL13CHS (406851)

LOCATION: Elevation: 1520'

Quadrangle: Philippi

District: Pleasant

County: Barbour

Latitude: 11.846 Feet South of: 39 Deg. 15 Min. 00 Sec.
Longitude: 3.625 Feet West of: 80 Deg. 00 Min. 00 Sec.

Company: CNX Gas Company LLC

	Casing and Tubing	Used in drilling	Left in well	Cement fill up Co. Ft.
Address: <u>P.O. Box 1248</u>				
<u>Jane Lew, WV 26378</u>				
Agent: <u>Kent Wright</u>				
Inspector: <u>Bryan Harris</u>				
Date Permit Issued: <u>02/14/2011</u>				
Date Well Work Commenced: <u>09/23/2011</u>	<u>20"</u>	<u>100'</u>	<u>100'</u>	<u>Grouted In</u>
Date Well Work Completed: <u>10/07/2011</u>				
Verbal Plugging: _____	<u>13 3/8"</u>	<u>657.6'</u>	<u>657.6'</u>	<u>486 sks</u>
Date Permission granted on: _____				
Rotary: <u>Cable</u> Rig: <u>X</u>	<u>9 5/8"</u>	<u>2080'</u>	<u>2080'</u>	<u>640 sks</u>
Total Vertical Depth (feet): <u>6720'</u>				
Total Measured Depth (feet): _____				
Fresh Water Depth (ft.): <u>30'</u>				
Salt Water Depth (ft.): <u>N/A</u>				
Is coal being mined in area (N/Y): <u>No</u>				
Coal Depths (ft.): <u>190', 230', 310'</u>				
Void(s) encountered (N/Y) Depth(s): _____				

OPEN FLOW DATA

10/07/2011 - VERTICAL AND HORIZONTAL DRILLING
RECONVENING THE VERTICAL AND HORIZONTAL DRILLING IN 2011

RECEIVED
Office of Oil & Gas

DEC 10 2012

Producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static Rock Pressure _____ psig (surface pressure) after 12 Hours

Second Producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow * _____ MCF/d Oil: Initial open flow * _____ Bbl/d
Final open flow * _____ MCF/d Final open flow * _____ Bbl/d
Time of open flow between initial and final tests * _____ Hours
Static rock Pressure * _____ psig (surface pressure) after * _____ Hours

* COMMINGLED WITH PREVIOUS FORMATIONS

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature

Date

WR-35

Rev (5-01)

Page 2 of 2

WELL: PHL13CHS (406851)

Were core samples taken? Yes ___ No X Were cuttings caught during drilling? Yes X No ___

Were ___ Electrical, ___ Mechanical, X or Geophysical logs recorded on this well?

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

PERFORATED INTERVALS, FRACTURING, OR STIMULATING:

10/7/2011 NO FRACTURE.

VERTICAL AND HORIZONTAL DRILLING INCOMPLETE.

PLAN ON RECONVENING THE VERTICAL AND HORIZONTAL DRILLING IN 2014.

FORMATIONS ENCOUNTERED:

Fill	0	30	Sand/Shale	30	190	Coal	190	195	Sand/Clay	195	230
Sand/Shale	230	310	Coal	310	315	Sand/Shale	315	1045	Shale/RedRock	1045	
Limestone/Shale	1250	1325	Limestone/Sand	1325	1600	Sand/Shale	1600				

	TOP	BASE
LITTLE LIME	1162	1170
BIG LIME	1188	1240
BIG INJUN	1240	1365
GANTZ	1550	1574
FOURTH SAND	2089	2118
WARREN	2520	2550
SPEECHLEY	2834	2873
BALLTOWN	2996	3024
RILEY	3720	3940
BENSON	4020	4085
FIRST ELK	4250	4302
SECOND ELK	4400	4480
THIRD ELK	4660	4680
FOURTH ELK	4934	4975
SYCAMORE GRIT	6298	6405
UN-NAMED SILTSTONE	6720	

RECEIVED
Office of Oil & Gas

DEC 10 2012

WV Department of
Environmental Protection

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 12/10/2012
API No: 47461-03223L
Lease No: 071053; 70567; DV014571

Farm Name: MCCAULEY, RANDALL & JUDY Operator Well No. PHL13DHS (446853)

LOCATION: Elevation: 1520' Quadrangle: Philippi

District: Pleasant

County: Barbour

Latitude: 11,855 Feet South of: 39 Deg. 15 Min. 00 Sec.

Longitude: 3,643 Feet West of: 80 Deg. 00 Min. 00 Sec.

Company: CNX Gas Company LLC

	Casing and Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Address: <u>P.O. Box 1248</u>				
<u>Jane Lew, WV 26378</u>				
Agent: <u>Kent Wright</u>				
Inspector: <u>Bryan Harris</u>				
Date Permit Issued: <u>02/14/2011</u>				
Date Well Work Commenced: <u>09/06/2011</u>	<u>30"</u>	<u>103'</u>	<u>103'</u>	<u>Grouted In</u>
Date Well Work Completed: <u>09/20/2011</u>				
Verbal Logging: <u>13 3/8"</u>		<u>662'</u>	<u>662'</u>	<u>530 sks</u>
Date Permission granted on: <u>Rotary Cable Rig X</u>	<u>9 5/8"</u>	<u>1989'</u>	<u>1989'</u>	<u>660 sks</u>
Total Vertical Depth (feet): <u>6359'</u>				
Total Measured Depth (feet):				
Fresh Water Depth (ft.): <u>N/A</u>				
Salt Water Depth (ft.): <u>N/A</u>				
Is coal being mined in area (N/Y)? <u>No</u>				
Coal Depths (ft.): <u>190', 230', 310'</u>				
Void(s) encountered (N/Y) Depth(s)				

OPEN FLOW DATA 09/20/2011 - VERTICAL AND HORIZONTAL DRILLING TO RECONVENING THE VERTICAL AND HORIZONTAL DRILLING IN 2014.

RECEIVED
Office of Oil & Gas

DEC 10 2012

Producing formation _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ 12 Hours
Static Rock Pressure _____ psig (surface pressure) after _____ 12 Hours

Second Producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow * _____ MCF/d Oil: Initial open flow * _____ Bbl/d
Final open flow * _____ MCF/d Final open flow * _____ Bbl/d
Time of open flow between initial and final tests _____ * Hours
Static rock Pressure * _____ psig (surface pressure) after * _____ Hours

* COMMINGLED WITH PREVIOUS FORMATIONS

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature

Date

Page 2 of 2

Were Electrical, Mechanical, X or Geophysical logs recorded on this well?

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

9/20/2011 NO FRACTURE.

VERTICAL AND HORIZONTAL DRILLING INCOMPLETE.

PLAN ON RECONVENING THE VERTICAL AND HORIZONTAL DRILLING IN 2014.

Fill	0	30	Sand/Shale	30	190	Coal	190	195	Sand/Clay	195	230
Sand/Shale	230	310	Coal	310	315	Sand/Shale	315	1045	Shale/RedRock	1045	
Limestone/Shale	1250	1325	Limestone/Sand	1325	1600	Sand/Shale	1600				

[illegible]

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas

DATE: 12/10/12
AP# No: 47-001-03238 00, -03238
Lease No: 70642; L210154; 70667; 071053;
70640

Well Operator's Report of Well Work

Farm Name: MCCAULEY, RANDALL & JUDY Operator Well No. PH13EHS (407545)

LOCATION: Elevation: 1520'

Quadrangle: Philippi

District: Pleasant

County: Barbour

Latitude: 11,864 Feet South of: 39 Deg. 15 Min. 00 Sec.
Longitude: 3,661 Feet West of: 80 Deg. 00 Min. 00 Sec.

Company: CNX Gas Company LLC

	Casing and Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Address: <u>P.O. Box 1248</u>				
<u>Jane Lew, WV 26378</u>				
Agent: <u>Kent Wright</u>				
Inspector: <u>Bryan Harris</u>				
Date Permit Issued: <u>06/17/2011</u>				
Date Well Work Commenced: <u>07/31/2011</u>	<u>20"</u>	<u>103'</u>	<u>103'</u>	<u>Grouted In</u>
Date Well Work Completed: <u>09/04/2011</u>				
Verbal Plugging:	<u>13 3/8"</u>	<u>653'</u>	<u>653'</u>	<u>520 sks</u>
Date Permission granted on:				
Rotary Cable Rig: <u>X</u>	<u>9 5/8"</u>	<u>2019'</u>	<u>2019'</u>	<u>635 sks</u>
Total Vertical Depth (feet): <u>4320'</u>				
Total Measured Depth (feet):				
Fresh Water Depth (ft.): <u>N/A</u>				
Salt Water Depth (ft.): <u>N/A</u>				
Is coal being mined in area (N/Y): <u>No</u>				
Coal Depths (ft.): <u>190', 230', 310'</u>				
Void(s) encountered (N/Y) Depth(s)				

OPEN FLOW DATA

09/04/2011 - VERTICAL AND HORIZONTAL DRILLING COMPLETED IN
RECONVENING THE VERTICAL AND HORIZONTAL DRILLING IN

RECEIVED
Office of Oil & Gas

DEC 10 2012

Producing formation

Gas: Initial open flow _____ MCF/d
Final open flow _____ MCF/d
Time of open flow between initial and final tests _____ 12 Hours
Static Rock Pressure _____ psig (surface pressure) after _____ 12 Hours

Pay zone depth (ft)

WV Department of
Environmental Protection

Second Producing formation

Gas: Initial open flow * _____ MCF/d
Final open flow * _____ MCF/d
Time of open flow between initial and final tests * _____ Hours
Static rock Pressure * _____ psig (surface pressure) after * _____ Hours

Pay zone depth (ft)

Oil: Initial open flow * _____ Bbl/d
Final open flow * _____ Bbl/d

* COMMINGLED WITH PREVIOUS FORMATIONS

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature

Date

Page 2 of 2

WV Department of
Environmental Protection

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 12/10/2012
API No: 47-001-032397
Lease No: 70642; 70667; 071053; 70640

001-032397

Farm Name: MCCAULEY, RANDALL & JUDY Operator Well No. PHL13FHS (407548)

LOCATION: Elevation: 1520'

Quadrangle: Philippi

District: Pleasant

County: Barbour

Latitude: 11,872 Feet South of: 39 Deg. 15 Min. 00 Sec.

Longitude: 3,679 Feet West of: 80 Deg. 00 Min. 00 Sec.

Company: CNX Gas Company LLC

	Casing and Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Address: <u>P.O. Box 1248</u>				
<u>Jane Lew, WV 26378</u>				
Agent: <u>Kent Wright</u>				
Inspector: <u>Bryan Harris</u>				
Date Permit Issued: <u>06/17/2011</u>				
Date Well Work Commenced: <u>11/30/2011</u>	<u>20"</u>	<u>40'</u>	<u>40'</u>	<u>Grouted In</u>
Date Well Work Completed: <u>12/15/2011</u>				
Verbal Plugging:	<u>13 3/8"</u>	<u>659.4'</u>	<u>659.4'</u>	<u>600 sks</u>
Date Permission granted on:				
Rotary <u>Cable</u> <u>Rig</u> <u>X</u>	<u>9 5/8"</u>	<u>2002.45'</u>	<u>2002.45'</u>	<u>625 sks</u>
Total Vertical Depth (feet): <u>4400'</u>				
Total Measured Depth (feet):				
Fresh Water Depth (ft.): <u>1045'</u>				
Salt Water Depth (ft.): <u>N/A</u>				
Is coal being mined in area (N/Y)?: <u>No</u>				
Coal Depths (ft.): <u>190', 230', 310'</u>				
Void(s) encountered (N/Y) Depth(s)				

OPEN FLOW DATA

12/15/2011 - VERTICAL AND HORIZONTAL DRILLING IN COMPLETE. PLAN ON
RECONVENING THE VERTICAL AND HORIZONTAL DRILLING IN.

DEC 10 2012

Producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d _____ Bbl/d
Final open flow _____ MCF/d _____ Bbl/d
Time of open flow between initial and final tests _____ 12 Hours
Static Rock Pressure _____ psig (surface pressure) after 12 Hours

Second Producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow * _____ MCF/d _____ Bbl/d
Final open flow * _____ MCF/d _____ Bbl/d
Time of open flow between initial and final tests * _____ Hours
Static rock Pressure * _____ psig (surface pressure) after * _____ Hours

*** COMMINGLED WITH PREVIOUS FORMATIONS**

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Signature

Date

	TOP	BASE
LITTLE LIME	1162	1170
BIG LIME	1188	1240
BIG INJUN	1240	1365
GANTZ	1550	1574
FOURTH SAND	2089	2118
WARREN	2520	2550
SPEECHLEY	2834	2873
BALLTOWN	2996	3024
RILEY	3720	3940
BENSON	4020	4085
FIRST ELK	4250	4302
SECOND ELK	4400	

RECEIVED
Office of Oil & Gas
DEC 10 2012
WV Department of
Environmental Protection

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 9-19-2012
API #: 47-009-00097

Farm name: Linda Greathouse BRK 3H

Operator Well No.: 833467

LOCATION: Elevation: 1150'

Quadrangle: 247-Bethany

District: Buffalo

County: Brooke

Latitude: 6620' Feet South of 40 Deg. 12 Min. 30 Sec.

Longitude 1520' Feet West of 80 Deg. 35 Min. 00 Sec.

Company: Chesapeake Appalachia, L.L.C.

Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
P.O. Box 18496				
Oklahoma City, OK 73154-0496	26"	110'	110'	Driven
Agent: Eric Gillespie	20"	343'	343'	544 Cu. Ft.
Inspector: Bill Hendershot	13 3/8"	731'	731'	931 Cu. Ft.
Date Permit Issued: 6-6-2011	9 5/8"	1781'	1781'	785 Cu. Ft.
Date Well Work Commenced: 11-19-2011	5 1/2"	12749'	12749'	3750 Cu. Ft.
Date Well Work Completed: 6-25-2012				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): 5843'				
Total Measured Depth (ft): 12749'				
Fresh Water Depth (ft.): 62', 94'				
Salt Water Depth (ft.): 1025'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 300'				
Void(s) encountered (N/Y) Depth(s) Y 300'				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation Marcellus Pay zone depth (ft) 6,125'-12,617'

Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d

Final open flow Not Tested MCF/d Final open flow _____ Bbl/d

Time of open flow between initial and final tests _____ Hours

Static rock Pressure _____ psig (surface pressure) after _____ Hours

Second producing formation _____ Pay zone depth (ft) _____

Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d

Final open flow _____ MCF/d Final open flow _____ Bbl/d

Time of open flow between initial and final tests _____ Hours

Static rock Pressure _____ psig (surface pressure) after _____ Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Marlene Williams
Signature

9-19-2012
Date

Were core samples taken? Yes _____ No N

Were cuttings caught during drilling? Yes Y No _____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list GR, neutron, density, and resistivity
open hole logs run from 0-1804' MD; LWD GR from 5332-12749' MD.

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

(See Attached)

Plug Back Details Including Plug Type and Depth(s):

<u>Formations Encountered:</u>	<u>Top Depth</u>	<u>/</u>	<u>Bottom Depth</u>
<u>Surface:</u>			

(See Attached)

Well Number and Name: 833467 Linda Greathouse BRK 3H

[illegible]

LATERAL SIDETRACK WELLBORE (no vertical pilot hole associated with this well)

Maximum TVD of wellbore: 5843 ft TVD @ 6200 ft MD

Formation/Lithology	Top Depth, MD (ft)	Top Depth, TVD (ft)	Bottom Depth, MD (ft)	Bottom Depth, TVD (ft)
SH/LS/SS	0	0	300	300
PITTSBURG COAL	300	300	307	307
LS/SH	307	307	360	360
SS	360	360	1290	1290
BIG LIME (LS)	1290	1290	1420	1420
BIG INJUN (SS)	1420	1420	1630	1630
SHALE	1630	1630	5689	5661
GENESEO (SH)	5689	5661	5703	5672
TULLY (LS)	5703	5672	5794	5732
HAMILTON (SH)	5794	5732	5988	5816
MARCELLUS (SH)	5988	5816		
TD OF LATERAL			12749	5778

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 9-12-2012
API #: 47-009-00104

Farm name: Robert Bone BRK 3H Operator Well No.: 833484

LOCATION: Elevation: 1150' Quadrangle: Bethany

District: Buffalo County: Brooke
Latitude: 5310' Feet South of 40 Deg. 15 Min. 00 Sec.
Longitude 11290' Feet West of 80 Deg. 35 Min. 00 Sec.

Company: Chesapeake Appalachia, L.L.C.

Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
P.O. Box 18496				
Oklahoma City, OK 73154-0496	20"	102'	102'	477 Cu. Ft.
Agent: Eric Gillespie	13 3/8"	331'	331'	421 Cu. Ft.
Inspector: Bill Hendershot	9 5/8"	1665'	1665'	763 Cu. Ft.
Date Permit Issued: 7-12-2011	5 1/2"	11003'	11003'	2846 Cu. Ft.
Date Well Work Commenced: 10-2-2011				
Date Well Work Completed: 10-26-2011				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): 5882' (cement plug @ 5074'-5886')				
Total Measured Depth (ft): 11003'				
Fresh Water Depth (ft.): 61', 200'				
Salt Water Depth (ft.): 1146'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 230'				
Void(s) encountered (N/Y) Depth(s) Y 230'				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation Marcellus Pay zone depth (ft) 8,150'-10,867'

Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d

Final open flow Not Tested MCF/d Final open flow _____ Bbl/d

Time of open flow between initial and final tests _____ Hours

Static rock Pressure _____ psig (surface pressure) after _____ Hours

Second producing formation _____ Pay zone depth (ft) _____

Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d

Final open flow _____ MCF/d Final open flow _____ Bbl/d

Time of open flow between initial and final tests _____ Hours

Static rock Pressure _____ psig (surface pressure) after _____ Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Madeline Williams
Signature

9-14-2012
Date

Were core samples taken? Yes _____ No X

Were cuttings caught during drilling? Yes _____ No X

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list GR, neutron, density, and resistivity
open hole logs run from 0' - 5,888' MD; sonic log from 4,691' - 5,888' MD; LWD GR from 4,928' - 10,998' MD.

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

(See Attached)

Plug Back Details Including Plug Type and Depth(s): Cement plug @ 5074' - 5866'

<u>Formations Encountered:</u>	<u>Top Depth</u>	<u>/</u>	<u>Bottom Depth</u>
<u>Surface:</u>			

(See Attached)

Well Number and Name: 833484 Robert Bone BRK 3H

[illegible]

VERTICAL PILOT HOLE

Formation/Lithology	Top Depth, TVD/MD (ft)	Bottom Depth, TVD/MD (ft)
LS/SHALE	0	230
PITTSBURG COAL	230	235
LS/SILTSTONE	235	400
SS	400	490
SHALE	490	610
SS/SHALE	610	1270
BIG LIME (LS)	1270	1300
BIG INJUN (SS)	1300	1574
SHALE/SS	1574	3700
SHALE	3700	5640
GENESEO (SH)	5640	5654
TULLY (LS)	5654	5710
HAMILTON (SH)	5710	5802
MARCELLUS (SH)	5802	5860
ONONDAGA (LS)	5862	
TD OF PILOT HOLE		5882

**LATERAL SIDETRACK
WELLBORE**

Formation/Lithology	Top Depth, MD (ft)	Top Depth, TVD (ft)	Bottom Depth, MD (ft)	Bottom Depth, TVD (ft)
LS/SHALE	0	0	230	230
PITTSBURG COAL	230	230	235	235
LS/SILTSTONE	235	235	400	400
SS	400	400	490	490
SHALE	490	490	610	610
SS/SHALE	610	610	1270	1270
BIG LIME (LS)	1270	1270	1383	1383
BIG INJUN (SS)	1383	1383	1574	1574
SHALE/SS	1574	1574	3700	3700
SHALE	3700	3700	5670	5637
GENESEO (SH)	5670	5637	5684	5648
TULLY (LS)	5684	5648	5768	5706
HAMILTON (SH)	5768	5706	5956	5794
MARCELLUS (SH)	5956	5794		
TD OF LATERAL			11003	5759